Title of Article in Conference Proceedings: Aflatoxin Contamination of some Edible Grains from Lagos and Ota Markets, Nigeria

Authors: Mary Oloyede, Akan Williams and Nsikak Benson [2016).

Outlet: Proceedings of the 8th International Conference on Environmental Science and Technology. In: Sorial, G. and Hong, J.: *Environmental Science and Technology 2016* Vol. 1, pp. 396-399., American Science Press, Houston, USA, ISBN 978-5-5323-2259-4, June 6-10, 2016, Houston, Texas, USA.

Abstract: Levels of aflatoxin in maize, sorghum, millet, wheat and rice obtained from Lagos and Ota markets in Nigeria are reported. Aflatoxin determination was carried out using high performance liquid chromatograph coupled with diode array detector (HPLC-DAD). The concentrations of aflatoxins in the grains obtained from Mile 12 market, Lagos ranged between 34.3 μg/kg and 300.1 μg/kg while the concentrations in the grains obtained from Dada market, Ota ranged between 42.3 μg/kg and 1245 μg/kg. The levels of total aflatoxins were generally higher in the grains sampled from Lagos market. These values exceed the maximum limits of 10 μg/kg set by regulatory bodies in Nigeria, thus posing a great health risk for consumers. Recovery studies indicated that the method was efficient as recovery of the residue ranged between 82.2% and 96.2%. There is need for the creation of awareness on aflatoxin in order to sensitize people on health hazards associated with its contamination. In addition, there is need to promote proper practices of grain production and storage to prevent its contamination and reduce exposure.